

ones which have the power of germination. Each spore consists of two cells, both of which are furnished on either side just above the point of juncture with a single pore through which the germinating thread protrudes exactly after the fashion of pollen tubes. Occasionally all the four pores are fertile, but more frequently one or two only protrude the cotyledonoid. The pores of the two cells, it should be observed, correspond exactly in position. In no case have more than two been observed in each hemispore.—*M. J. B.—Gard. Chron.*

#### METEOROLOGICAL OBSERVATIONS FOR APRIL 1849.

*Chiswick.*—April 1. Rain: fine: showery. 2. Densely clouded. 3. Fine: cloudy. 4. Foggy: rain. 5. Drizzly: fine. 6. Heavy dew: very fine. 7. Cloudy: drizzly. 8. Hazy. 9. Foggy: densely overcast. 10. Hazy: heavy clouds. 11. Cloudy and cold: clear and frosty at night. 12. Cloudy. 13. Rain. 14. Slight haze: fine: clear and frosty. 15. Rain. 16. Cloudy throughout. 17. Cold and dry: clear and frosty at night. 18. Clear: snow: cloudy. 19. Heavy fall of rain, sleet and hail throughout the day. 20. Snow and hail in forenoon, stormy showers: clear and frosty at night. 21. Clear: cloudy: clear and frosty. 22. Overcast: rain at night. 23. Rain. 24. Cloudy. 25. Drizzly: fine. 26. Rain: cloudy: clear: slight frost. 27. Foggy: cloudy: slight rain. 28. Fine: heavy showers: partly hail. 29. Slight haze: very fine: overcast. 30. Fine: clear.

Mean temperature of the month .....	44°·29
Mean temperature of April 1848 .....	47 ·33
Mean temperature of April for the last twenty-three years	47 ·53
Average amount of rain in April .....	1·46 inch.

*Boston.*—April 1. Rain: rain A.M. 2. Cloudy: rain P.M. 3. Cloudy. 4. Fine. 5. Rain: rain A.M. and P.M. 6. Fine. 7. Fine: rain P.M. 8, 9. Rain: rain A.M. and P.M. 10. Rain: rain A.M. 11, 12. Cloudy. 13. Rain: rain A.M. and rain and snow P.M. 14. Cloudy: rain A.M. 15, 16. Cloudy. 17. Fine: snow P.M.: stormy. 18. Fine: rain and snow P.M. 19, 20. Cloudy. 21. Fine. 22, 23. Fine: rain P.M. 24, 25. Fine. 26. Cloudy: rain early A.M. 27. Fine. 28. Fine: rain P.M. 29, 30. Fine.

*Applegarth Manse, Dumfries-shire.*—April 1. Showers: thunder. 2. Spring showers. 3. Showers: thunder. 4. Frost: calm and fine. 5. Showers. 6. Fair: beautiful day. 7. Fair, but rigid and ungenial. 8. Slight shower A.M.: parching wind. 9, 10. Fair and chilly. 11. Fair and chilly: frost A.M. 12. Cloudy A.M.: rain P.M. 13. Frost: snow: hail: fine P.M. 14. Snow an inch deep: rain P.M. 15. Fair and fine. 16. Frost: slight shower of snow. 17. Frost very hard: shower of snow. 18. Frost: snow-showers: rain P.M. 19. Frost: shower of snow: fair and keen P.M. 20. Frost: clear and cold: slight shower of snow. 21. Frost very hard: clear and cold. 22. No frost: rain gentle: cloudy. 23. Rain: soft and warm: blessed change of weather. 24. Fine A.M.: grey cloudy: rain P.M. 25. Fine A.M.: shower of hail: rain. 26. Fine A.M.: shower. 27. Shower early: rain and wind P.M. 28. Growing day: one slight shower. 29. Fair and fine: cloudy P.M. 30. Most beautiful spring day.

Mean temperature of the month .....	42°·3
Mean temperature of April 1848 .....	43 ·2
Mean temperature of April for the last twenty-five years	44 ·4
Rain in April 1848 .....	2·52 inches.
Average amount of rain in April for the last twenty years	1·76 „

*Sandwick Manse, Orkney.*—April 1. Cloudy: rain. 2. Showers: drizzle. 3. Damp: showers. 4. Drizzle. 5. Damp: showers. 6. Damp. 7. Damp: cloudy. 8. Bright: clear. 9. Bright: cloudy. 10, 11. Cloudy. 12. Showers: cloudy. 13. Bright: cloudy. 14. Bright: clear: aurora. 15. Cloudy. 16. Snow-showers: snow. 17. Snow-showers: drift: snow-showers. 18. Snow-showers: frost: aurora. 19. Sleet: hail-showers: aurora. 20. Bright: frost: clear: aurora. 21. Bright: clear: aurora. 22. Cloudy. 23. Drops: cloudy. 24. Bright: hazy. 25. Clear. 26. Cloudy. 27. Clear. 28. Clear: very clear. 29, 30. Fine: cloudy.